

thermoplastic polymer results in a reduced leakage of substances compared to the leakage of substances from a stopper made from a butyl based rubber alone.

44. (New) The stopper according to claim 43 having a hardness of 40-80 Shore A, wherein the hardness is measured in conformance with ASTM D2240, 5 sec., 1991.

45. (New) The stopper according to claim 44, having a hardness of 45-75 Shore A, when measured according to ASTM D2240, 5 sec., 1991.

46. (New) The stopper according to claim 43 or 44 or 45 wherein the stopper has a hardness 65-75 Shore A, when measured according to ASTM D2240. 5 Sec.1991.

47. (New) The stopper according to claim 43 for a medical container, comprising an injection-mouldable material made of a blend of 13-25 % by weight of a thermoplastic polymer and 75-87 % by weight of a butyl based rubber

48. (New) The stopper according to claim 43, wherein the butyl based rubber is halogenated butyl.

49. (New) The stopper according to claim 48, wherein the butyl based rubber is a bromobutyl.

B1
Container

50. (New) The stopper according to claim 43, wherein the butyl based rubber is at least partially cross-linked.
51. (New) The stopper according to claim 43 having a substantially circular cross-section.
52. (New) The stopper according to claim 51, wherein the stopper glides longitudinally when placed inside a medical container when force is applied to the stopper.
53. (New) The stopper according to claim 52, wherein the stopper glides when a rod is used to push the stopper in.
54. (New) A medical container for storing a liquid medicament, comprising a distal and a proximal end portion and at least one wall defining an interior space for such to liquid medicament, wherein one of the end portions comprises a stopper that is comprised of an injection-mouldable material made of a combination of butyl based rubber and a thermoplastic polymer, characterized in that the butyl based rubber is present in an amount of 70-90 % by weight and the thermoplastic polymer is present in an amount of 30-10 % by weight wherein the thermoplastic polymer is selected from the group of polyolefines consisting of polypropylene and polyethylene and wherein the combination of the butyl based rubber and the thermoplastic polymer results in a reduced leakage of substances compared to the leakage of substances from a stopper made from a butyl based rubber alone.
55. (New) The medical container according to claim 54, wherein the at least one wall is non-flexible.
56. (New) The medical container of claim 54, wherein the stopper glides longitudinally

inside the medical container when a force is applied.

57. (New) The medical container of claim 54, further comprising a rod for applying the force to the stopper.

58. (New) The medical container of claim 54, wherein the stopper has a hardness of 40-80 Shore A when tested in conformance with ASTM 02240, 5 sec., 1991.

59. (New) A process of producing a stopper comprising an injection-mouldable material made of a combination of butyl based rubber and a thermoplastic polymer, characterized in that the butyl based rubber is present in an amount of 70-90 % by weight and the thermoplastic polymer is present in an amount of 30—10 % by weight wherein the thermoplastic polymer is selected from the group of polyolefines consisting of polypropylene and polyethylene and wherein the combination of the butyl based rubber and the thermoplastic polymer results in a reduced leakage of substances compared to the leakage of substances from a stopper made from a butyl based rubber alone, the process comprising the steps of:

- heating a butyl based rubber and melting a thermoplastic polymer.
- homogenising the stopper material,
- moulding the stopper material by injection moulding and
- obtaining the stopper comprised of butyl based rubber present in an amount 70-90 % by weight and thermoplastic present in an amount of 30-10 % by weight.

60. (New) A process of producing a stopper according to claim 59, whereby the stopper is moulded onto a rod by the means of two-component injection moulding.